

### CLAIM AMENDMENTS

This listing of claims will replace all prior versions and listings of claims in the application.

#### Listing of Claims

1. (Currently Amended) Method of producing and displaying an image on a display screen of a volume from a multi-dimensional object data set, characterized in that:

a surface associated with the volume is identified,

an initial position on the identified surface is selected,

at least one depth associated with the identified surface is selected from a priori information,

a reformat slice is produced from the object data set at the selected depth along the normal to the identified surface at the selected initial position, and

a resulting image is displayed on a display screen.

2. (original) A method as in claim 1, characterized in that:

at least one further position on the identified surface is selected and a reformat slice is produced at said selected depth along the normal to the identified surface at said further selected position.

3. (currently amended) A method ~~as in claim 1~~ of producing an displaying an image on a display screen of a volume from a multi-dimensional object data set, characterized in that:

a surface associated with the volume is identified.

an initial position on the identified surface is selected,  
at least one depth associated with the identified surface is selected,  
a reformat slice is produced from the object data set at the selected depth along the  
normal to the identified surface at the selected initial position, and  
a resulting image is displayed on a display screen, characterized in that:  
reformat slices are produced perpendicular to the normal to the identified surface at  
the selected position, and  
the depth associated with the identified surface is selected by selecting one of those  
reformat slices.

4. (currently amended) A method as in claim 1 of producing and displaying an image on a display  
screen of a volume from a multi-dimensional object data set, characterized in that:

a surface associated with the volume is identified,  
an initial position on the identified surface is selected,  
at least one depth associated with the identified surface is selected,  
a reformat slice is produced from the object data set at the selected depth along the  
normal to the identified surface at the selected initial position, and  
a resulting image is displayed on a display screen, characterized in that:  
a transverse view is created, which includes the identified surface and the selected  
point, and  
the depth associated with the identified surface is selected from this transverse view.

5. (Cancelled)

6. (Previously Presented) A method as in claim 1, characterized in that:

the reformat slice is perpendicular to the normal to the identified surface at the selected point on the identified surface, at the point on the reformat slice where the reformat slice is intersected by said normal to the identified surface.

7. (original) A method as in claim 1, in which reformat slices are produced along the normal to the identified surface at the selected position, characterized in that:

the reformat slice is produced from a stack of reformat slices produced perpendicular to the normal to the selected point on the surface.

8. (Currently amended) A tangible media containing code for a computer program characterized in that:

the computer program contains instructions to enable a surface associated with the volume to be selected, instructions to enable an initial point on the identified surface to be selected, instructions to enable at least one depth to be selected from a priori information and instructions to enable a reformat slice to be produced from the object data set at the selected depth along the normal to the identified surface at the selected position.

9. (Currently Amended) A workstation configured for the purposes of producing, displaying and using images and containing instructions for the production and display of an image of a volume from a multi-dimensional object data set, characterized in that:

the workstation further includes instructions to enable a surface associated with the volume to be selected, instructions to enable an initial point on the identified surface to be selected, instructions to enable at least one depth to be selected from a priori information and instructions to enable a reformat slice to be produced from the object data set at the selected depth along the normal to the identified surface at the selected position.